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Future Proofing Ireland for River Floods: The potential for Natural Flood Management

Mary Bourke

Department of Geography, Trinity College, Dublin, Ireland (bourkem4@tcd.ie)

Climate model predictions for Ireland show an increased probability of high magnitude flood events and an earlier seasonal onset of flood conditions. Many European agencies have adopted Natural Flow Management (NFM) approaches to reduce flood risk. Data from demonstration catchments suggest it is a viable and cost-effective approach for flood management. Given that Ireland retains much of its extensive agricultural lands, there is potential for restored and created wetlands, restored peat bogs, reconnect channels with floodplains, and the growth of native woodlands. NFM is not yet explored sufficiently for application in the Irish landscape. The absence of an evidence base has contributed to a lack of uptake. The Office of Public Works (OPW) is the statutory body charged with flood alleviation works in Ireland. They are mandated to reduce flood risk for the 1-100-yr flood. When options such as water retention reservoirs have been considered, as part of large flood relief schemes, they were deemed cost-ineffective due to the high cost of agricultural land. In addition, such measures highlight issues of potential safety, planning, cost and insurance. One example, the Corkagh Park flood attenuation ponds – were reported to have been a cost-effective solution and the financial viability was aided by the pre-existing public ownership of the land.

Lower cost, smaller measures may present a more successful approach, particularly for smaller communities. This paper highlights some of the initial projects that have sought to deploy NFM approaches in Ireland. They have been initiated by community action groups who have formed in reaction to i) unprecedented rural flood events and/or ii) the OPW flood relief plans which were viewed and objected to during a public consultation phase.